CLAIMS:

1. (currently amended) A modular swimming pool water heating system comprising a ~~first~~ casing for mounting in an attic of a building;

a heat exchange unit ~~removably mounted~~ for removable mounting in said ~~first~~ casing;

an opening in said ~~first~~ casing permitting access to the interior of the ~~first~~ casing for receiving said heat exchanger when the casing is mounted in an attic;

a cover removably mounted on said casing for closing said opening, whereby said heat exchange unit can readily be mounted in said casing;

an inlet manifold on said heat exchanger for introducing swimming pool water into said heat exchanger, said inlet manifold extending through said cover on said ~~first~~ casing when the ~~first~~ casing is closed;

an outlet manifold on said heat exchanger for returning water to a swimming pool, said outlet manifold extending through said cover on said ~~first~~ casing when the ~~first~~ casing is closed;

inlet sleeves for removable attachment to one side of said ~~first~~ casing for introducing air into the casing;

fan units for removable mounting on a second side of said ~~first~~ casing opposite said one side for drawing air into said ~~first~~ casing and through said heat exchange unit; and

elongated, flexible, ducts for connection to said inlet sleeves for receiving warm attic air from locations remote from said ~~first~~ casing and feeding said air to said ~~first~~ casing for passage through said heat exchange unit to heat any pool water circulating therethrough.

2. (original) The system of claim 1, including:

a first sensor for monitoring the temperature of air in an attic;

a second sensor for monitoring the temperature of water flowing from a swimming pool through said heat exchanger; and

a controller connected to both said sensors and said fan units for actuating the fan units only when the difference between the temperatures monitored by said first and second sensors reaches a predetermined level.

3. (original) The system of claim 2, wherein said predetermined level is approximately 20°F.